

AGREEMENT NUMBER

4600003670

REGISTRATION NUMBER

3860110456912

1. This Agreement is entered into between the State Agency and the Contractor named below:

STATE AGENCY'S NAME

Department of Water Resources

CONTRACTOR'S NAME

Desert Research Institute

The term of this Agreement is: **July 1, 2004** through **December 31, 2007**
This Agreement shall not become effective until approved by the Department of General Services.

3. The maximum amount of this Agreement is: **\$300,000.00**
Three Hundred Thousand Dollars and no cents.
4. The parties agree to comply with the terms and conditions of the following exhibits which are by this reference made a part of the Agreement.

Exhibit A – Scope of Work	3 pages
Attachment 1 – Key Personnel Resumes	9 pages
Attachment 2 – Sample Task Order	2 pages
Exhibit B – Budget Detail and Payment Provisions	1 page
Attachment 1 – Labor Rates	1 page
Exhibit C* – General Terms and Conditions	GTC 304
Exhibit D – Special Terms and Conditions for Department of Water Resources	3 pages
Attachment 1 – Recycled Content Certification Form	1 page
Attachment 2 – Travel and Per Diem Expenses	2 pages
Exhibit E – Additional Provisions	3 pages
Attachment 1 – Standard Contract Provisions Regarding Political Reform Act Compliance	2 pages

Items shown with an Asterisk (*), are hereby incorporated by reference and made part of this agreement as if attached hereto.
These documents can be viewed at www.ols.dgs.ca.gov/Standard+Language

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR

CONTRACTOR'S NAME (if other than an individual, state whether a corporation, partnership, etc.)

Desert Research Institute

BY (Authorized Signature)

John H. Bees

DATE SIGNED (Do not type)

9/15/04

PRINTED NAME AND TITLE OF PERSON SIGNING

Dr. Eric V. McDonald, Associate Research Professor

ADDRESS

**2215 Raggio Parkway
Reno, Nevada 89512**

**John H. Bees
Director, Sponsored Research Administration**

STATE OF CALIFORNIA

AGENCY NAME

Department of Water Resources

BY (Authorized Signature)

Lester A. Snow

DATE SIGNED (Do not type)

OCT 01 2004

PRINTED NAME AND TITLE OF PERSON SIGNING

Lester A. Snow, Director

ADDRESS

1416 9th Street, 11th Floor, Sacramento, CA 95814

Approved as to all form and sufficiency
Asst Chief Counsel, DWR

California Department of General Services Use Only

APPROVED
NOV - 1 2004
DEPT OF GENERAL SERVICES

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EXHIBIT A

SCOPE OF WORK

The Contractor will provide the Department of Water Resources Colorado River and Salton Sea Office with specialized engineering, environmental, and technical support as outlined in this Scope of Work. The work is in support of a programmatic environmental impact report in compliance with CEQA and NEPA for ecosystem restoration of the Salton Sea.

The work may consist of literature review and synthesis of existing information, identification of data gaps, monitoring and field studies, field data collection, computer modeling and science and peer review for the following categories:

1. Restoration strategies of exposed lake surfaces;
2. Establishment of vegetation on exposed surfaces;
3. Quantification of windblown fugitive dust; and
4. Ambient air quality impact on regional haze.

The work may require collaboration with, and not necessarily limited to: staff from Imperial County Air Pollution Control District, South Coast Air Quality Management District, California Air Resources Board, USGS, CH2M Hill and its subcontractors, and the Salton Sea Science Office. The work may also require peer review of work done by these and other agencies in the aforementioned categories

A. Description of Work

The services listed below are examples of work that may be required, and are not a guarantee of the work to be assigned under this agreement. Contractor will perform services defined by the Colorado River and Salton Sea Office, in writing, under individual Task Orders (see Project Management in this exhibit, Section B.)

1. Establishment or peer review of baseline air quality conditions for regions surrounding the Salton Sea. This may involve the collection and synthesis of air quality data of stations in areas surrounding the Sea and a correlation with climatological data to determine the latter's influence. The synthesis and correlation of data may involve computer modeling.
2. Peer review of, or identification of, data gaps and long term monitoring necessary to adequately define all air quality components for areas surrounding the Salton Sea.
3. Peer review of, or determination of, the potential emissivity of soils that could be exposed due to a lowering of the Salton Sea water surface elevation. This may require: use of portable windblown dust measuring devices to determine the emissivity of recently exposed surfaces in areas surrounding the Sea; comparison of grain size characteristics of these soils with submerged soil deposits; consideration of salt type and crust formation; as well as comparisons to other playas.
4. A literature review and assessment of the success of mitigative actions employed to control fugitive dust at other locations/playas.

5. Risk management analysis of potentially exposed soil deposits contributing to PM10 and PM2.5 suspended particulate matter as well as regional haze. This analysis may consider mitigative actions that could be taken prior and subsequent to exposure. Mitigative actions prior to exposure may consider the deposition of rock, gravel or more finely-grained soils from barges. Mitigative actions subsequent exposure may consider vegetation, gravel, soil emulsifiers and sealers or those deemed most successful as identified in No 4. above.

B. Project Management

The Colorado River and Salton Sea Office, through the Contractor, shall assign work in accordance with the above project and work descriptions through specific Task Order assigned. The Colorado River and Salton Sea Office will send Contractor a written assignment based upon one or more deliverables, as specified in Exhibit A, Scope of Work; it shall be comprised of a draft Task Order (see sample Task Order, Exhibit A, Attachment 2), and, it shall specify the scope of work, schedule, deliverables requested, and reporting and meeting requirements. Supplemental statements of work will be issued as necessary in the form of Task Orders, to define additional deliverables consistent with this overall scope of work, based on results of work completed under this Statement of Work.

Within seven (7) calendar days of receipt of a draft Task Order, Contractor shall complete and submit to the Colorado River and Salton Sea Office a completed draft Task Order with a detailed description of how the work will be performed, sources of data, expected results, cost and reimbursement parameters, the personnel to be assigned, and changes to or clarifications of work assignment, schedule or deliverables expected by the Colorado River and Salton Sea Office.

The Colorado River and Salton Sea Office shall approve or modify the Task Order within ten (10) calendar days and send the final proposed Task Order to Contractor's Contract Manager for signature. After Contractor signs and returns the Task Order, Colorado River and Salton Sea Office Contract Manager will sign it. A Task Order is of no force or effect until a final copy, signed by the Colorado River and Salton Sea Office Contract Manager, is returned to Contractor.

Task Orders are intended to provide additional detail, clarification, or direction regarding tasks described in this Scope of Work. Task orders for on-call or retainer work estimated to exceed \$50,000 will need to be approved by the State Department of General Services (DGS). Therefore, work shall not commence and no expenditures are authorized for a project until Contractor receives a physical copy of the final executed Task Order. State will not pay for work performed by Contractor unless it has been assigned in a fully executed Task Order.

If, after a Task Order has been issued, the Colorado River and Salton Sea Office determines that a substantial change(s) to the Task Order is necessary, the Colorado River and Salton Sea Office will issue a written amendment to the original Task Order. The amendment will include the reason(s) for the change(s), the specific change(s) required, and any adjustment to Contractor's payments resulting from the amended Task Order.

The Colorado River and Salton Sea Office, at its sole discretion, may cancel a Task Order at any time, for any reason. The Colorado River and Salton Sea Office will notify Contractor, in writing, that a Task Order has been canceled. The Colorado River and Salton Sea Office will pay Contractor for

all reasonable expenses for work performed under that Task Order up to the date of termination of the Task Order.

C. Project Representatives

The project representatives during the term of this agreement will be:

DWR Project Manager:

John Vrymoed, Supervising Engineer
Colorado River and Salton Sea Office
Department of Water Resources
1416 9th Street, Room 1148
Sacramento, California 95814
(916) 653-2986
johnv@water.ca.gov

Contractor Project Manager:

Dr. Eric McDonald (775) 673-7302 (Office)
Associate Research Professor (775) 673-7430 (Soil Lab)
Earth and Ecosystem Sciences (775) 673-7485 (FAX)
Desert Research Institute
2215 Raggio Parkway.
Reno, NV 89512

Project representatives may be changed upon written notice to the other party.



KEY PERSONNEL

Eric V. McDonald

Associate Research Professor
Desert Research Institute
Division of Earth and Ecosystem Sciences
2215 Raggio Parkway
Reno, NV 89512

Phone: 775-673-7302
Fax: 775-674-7557
email: emcdonald@dri.edu

Education

Ph.D.	1994	University of New Mexico	Earth and Planetary Science
M.S.	1987	Washington State University	Soil Science
B.S.	1984	Humboldt State University	Geology

Professional Interests

- Short-and long-term physiochemical and hydrological processes and changes occurring within the soil environment
- Dynamic relations among soil, vegetation, and surficial processes
- Use of soil-geomorphic relations to understand landscape evolution
- Role of soils in site characterization and development of mitigation and management strategies related to environmental

Professional Experience

2003-present	Interim Executive Director, Desert Research Institute, Center for Arid Lands Environmental Management
2000-present	Associate Research Professor, Desert Research Institute, Division of Earth and Ecosystem Sciences Director, Center for Arid Lands Environmental Management, Desert Research Institute
1997-2000	Assistant Research Professor, Desert Research Institute, Division of Earth and Ecosystem Sciences
1994-1997	Post-Doctoral Research Associate Los Alamos National Lab, Earth and Environmental Sciences Division
1993-1994	Associate in Soil Science, Washington State University, Dept. of Crops and Soils
1989-1993	Graduate Research Assistant, University of New Mexico, Dept. of Earth and Planetary Sciences
1987-1989	Associate in Soil Science, Washington State University, Dept. of Crops and Soils
1984-1987	Graduate Research Assistant, Washington State University, Dept. of Crops and Soils

Professional Activities

Associate Editor: Arid Soil Research and Rehabilitation.

Student Scholarship Review: Geological Society of America, University Nevada, Reno.

Publications

- McDonald, E.V., T. Bullard, J. Britt, and M.O. Ruiz. (In press). Identification of soil and geomorphic variables in development of an archeological predictive model for management of military lands in desert. *Perspectives on Military Geology and Geography*.
- McDonald, E.V., and T.G. Caldwell. 2003. Integration of Science and Environmental Management: Soil Evaluation in Support of Estimating Carrying Capacity and Landscape Degradation at the NTC, Ft. Irwin, CA. Charis Corp, Subcontract No. GS-012FG-B.
- Eppes, M.C., E.V. McDonald, and L.D. McFadden. 2003. Soil geomorphological studies in the Mojave Desert: Impacts of Quaternary tectonics, climate, and rock type on soils, landscapes, and plant community ecology. In D. Easterbrook (ed.), *Quaternary Geology of the United States*, INQUA 2003 Field Guide Volume, p. 105-123.
- Dahan, O., E.V. McDonald, and M.H. Young. 2003. Development of a flexible TDR probe for deep vadose zone monitoring. *Vadose Zone Journal* 2: 270-275.
- McDonald, E.V., L.D. McFadden, and S.G. Wells. 2002. Regional response of alluvial fans to the Pleistocene-Holocene climatic transition, Mojave Desert, California. In N. Lancaster, E. Yehouda, and S.G. Wells, (eds.), *Paleoenvironments and paleohydrology of the Mojave and Southern Great Basin Deserts. Geological Society of America Special Paper* No. 368: 189-205.
- McDonald, E.V., and T.G. Caldwell. 2002. Integration of revegetation project and soil hydrology at the NTC– Fort Irwin, California. Dept of Defense, Charis Corp. Contract D02016-01. 150 pp.
- McDonald, E.V. 2002. Numerical Simulations of Soil Water Balance in Support of Revegetation of Damaged Military Lands in Arid Regions. *Arid Land Research and Management* 16 (3): 277-291.
- Lashlee, D., F. Bruier, W. Murphy, and E.V. McDonald. 2002. Geomorphic mapping enhances cultural resource management at the US Army Yuma Proving Ground. *Arid Land Research and Management* 16 (3): 213-231.
- Hammerlynck, E.P., J.R. McAuliffe, E.V. McDonald, and S.D. Smith. 2002. Impacts of desert soil processes and drought on contrasting Mojave Desert shrubs. *Ecology* 83: 768-779.
- McDonald, E.V., and T.F. Bullard. 2001. Regarding the age of islands in the Snake River sector of the Deer Flat National Wildlife Refuge—Expert Opinion Report in State of Idaho v. United States of America, Case No. CIV97-0426-S0BLW: U.S. Department of Justice, 52 p. + 98 p. of appendices.
- McDonald, E.V., and T.G. Caldwell. Report on Soil Characteristics of Reclamation Technology for Mitigation Impacts Project Sites, National Training Center, Ft. Irwin, CA Contract #DAKF04-99-M-0202, 30 October 2001.
- McDonald, E.V., and T.F. Bullard. Expert Opinion Report: Basis and Reasons for the Opinions, Including Data and Information Considered in Forming the Opinions. Department of Justice, 30 November 2001.
- Phillips, W.M., E.V. McDonald, S.L. Reneau, and J. Poths. 1998. Dating soils and alluvium with cosmogenic ²¹Ne depth profiles: Case studies from the Pajarito Plateau, New Mexico, USA. *Earth and Planetary Sciences Letters* 160 (1-2):209-223.
- McFadden, L.D., E.V. McDonald, S.G. Wells, K. Anderson, J. Quade, and S.L. Forman. 1997. The vesicular layer of desert soils: Genesis and relationship to climate change and desert pavements based on numerical modeling, carbonate translocation behavior, and stable isotope and optical dating studies. *Geomorphology* 24: 101-145.
- McDonald, E.V., F.B. Pierson, G.N. Flerchinger, and L.D. McFadden. 1996. Application of a process-based soil-water balance model to evaluate the influence of Late Quaternary climate change on soil-water movement. *Geoderma* 74:167-192.
- McDonald, E.V., and L.D. McFadden. 1996. The Influence of Desert Dust on Soil Hydrology and Soil Forming Processes in the Mojave Desert, California. Association of America Geographers, Annual Meeting, Charlotte, NC.
- Wang, Y., E.V. McDonald, R. Amundson, L.D. McFadden, and O. Chadwick. 1996. An isotopic study of soils in chronological sequences of alluvial deposits, Providence Mountains, California. *Geological Society of America Bulletin* 108 (4): 379-391.
- McAuliffe, J.A., and E.V. McDonald. 1995. Soil-Vegetation Relations for Calcic Soils, East Mojave Desert: San Bernardino County Museum Association. In, R.E. Reynolds, and J. Reynolds (eds), *Ancient surfaces of the east Mojave Desert. San Bernardino County Museum Association Quarterly* 42 (3): 53-68.

McDonald, E.V., L.D. McFadden, and S.G. Wells. 1995. The relative influences of climate change, desert dust, and lithologic control on soil-geomorphic processes on alluvial fans, Mojave Desert, California: Summary of results. In, R.E. Reynolds, J. Reynolds (eds), *Ancient Surfaces of the East Mojave Desert*, *San Bernardino County Museum Association Quarterly* 42 (3): 35-42.

Collaborators

Dr. Ron Amundson	Dr. Bruce Harrison	Dr. Fredrick Pierson
Dr. Kirk Anderson	Dr. Kyle House	Dr. William Phillips
Dr. Russell Harmon	Dr. Eugene Kelly	Dr. Jay Quade
Dr. Thomas Bullard	Ms. Judith Lancaster	Dr. Steve Reneau
Dr. Alan Busacca	Dr. Nick Lancaster	Dr. Catherine Richardson
Dr. Oliver Chadwick	Dr. Claudia Lewis	Dr. Carlos Sancho
Dr. Lisa Ely	Dr. Patrick Longmire	Dr. Stan Smith
Dr. Gerald Flerchinger	Dr. Joseph McAuliffe	Dr. Sue Trumbore
Dr. Steven Forman	Dr. Leslie McFadden	Dr. Ken Verosub
Dr. Jamie Gardner	Dr. Frank Pazzaglia	Dr. Yang Wang
Dr. John Gosse	Dr. Juan Luis Pena-Monne	Dr. Stephen Wells

Advisors

Dr. Steven Reneau	Dr. Leslie McFadden	Dr. Alan Busacca
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Julianne J. Miller
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Education

M.S.	1996	University of Nevada, Las Vegas,	Water Resources Management
B.S.	1990	University of Washington	Geological Sciences

Certifications

- Engineering Intern, State of Nevada, #OT-3443
- Certified Environmental Manager, State of Nevada, #EM-1505
- Registered Environmental Property Assessor, National Registry of Environmental Professionals, REPA #5696

Professional Affiliations

- American Society of Civil Engineers, Associate Member
- Secretary, Hydraulics and Waterways Council, American Society of Civil Engineers (ASCE)
- Chair, Water Resources Technical Committee, Southern Nevada Branch, ASCE

Professional Experience

1999-present	Hydrologic Research Assistant, Desert Research Institute, Las Vegas, Nevada
1999	Senior Hydraulic Engineer, Tetra Tech ISG - FLO Engineering, Albuquerque, New Mexico
1992-1999	Senior Geologist/Hydrologist, Bechtel Nevada (Raytheon Services Nevada), Las Vegas, Nevada
1990	Hydrologist, U.S. Fish and Wildlife Service, Arctic National Wildlife Refuge (ANWR), Alaska

Publications

Dettling, C., R. H. French, J.J. Miller, and J. Carr. (In review). Use of Remotely Sensed Data to Estimate the Flow of Water to a Playa Lake. *Journal of Hydrologic Engineering*.

French, R.H., and J.J. Miller, 2003. Discussion of "Experimental Steep, Braided Flow: Application of Flooding Risk on Alluvial Fans," by D. Cazanagli, C. Paola, and G. Parker. *Journal of Hydraulic Engineering* 129 (11): 322-330.

French, R.H., J.J. Miller, and S. Curtis. 2003. Serendipity: Capturing a Design Level Precipitation Event. *Journal of the American Water Resources Association* 39 (2): 477-486.

Miller, J.J., R.H. French, M.H. Young, and S.A. Mizell. 2003. Effect of Soil Condition on Channel Transmission Loss During Ephemeral Flow Events. American Society of Civil Engineers, Environmental and Water Resources Institute, World Water and Environmental Congress, Conference Proceedings, June 23-27, Philadelphia, PA.

Miller, J.J. 1996. *Comparison of Models to Mitigate Flood Hazard to Transportation Alignments on Alluvial Fans*. Master's Thesis, University of Nevada, Las Vegas, 265 p.

David E. Rhode

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Education

Ph.D.	1987	University of Washington	Anthropology
M.A.	1982	University of Washington	Anthropology
B.A.	1978	University of California, Davis	Anthropology
B.A.	1978	University of California, Davis	Botany

Professional Interests

- Prehistory, archaeobotany, ethnobotany, and palaeoecology.
- Prehistoric human adaptations and paleoenvironmental change in arid environments.
- Packrat middens in the eastern Great Basin and western Mojave Desert.
- Plant remains from various archaeological sites throughout the Great Basin and American Southwest.
- Director of archaeological projects, including a large cultural resources protection program at Yucca Mountain, Nevada, as well as in California, Oregon, New Mexico, Washington, Alaska, China and Jordan.
- Thermoluminescence and obsidian hydration for developing chronologies of regional land use patterns.
- Detailed studies of prehistoric and historic Zuni agricultural land use and water control in west-central New Mexico.

Professional Experience

2001-present	Research Professor, Desert Research Institute, Division of Earth and Ecosystem Sciences
2000	Acting Director, Desert Research Institute, Division of Earth and Ecosystem Sciences
1999-2000	Deputy Director, Desert Research Institute, Division of Earth and Ecosystem Sciences
1999	Interim Deputy Director, Desert Research Institute, Quaternary Sciences Center
1993-2001	Associate Research Professor, Desert Research Institute
1989-1993	Assistant Research Professor, Desert Research Institute
1987-1989	Assistant Director, Zuni Archaeology Program, Zuni, New Mexico

Professional Activities

Graduate Faculty, University of Nevada, Reno
Society for American Archaeology
Graduate Faculty, University of Nevada, Las Vegas
Society of Archaeological Science
American Association for the Advancement of Science
American Quaternary Association
Am-Arcs of Nevada (professional adviser)
Society of Ethnobiology

Awards and Honors

- National Science Foundation Doctoral Dissertation Improvement Grant, University of Washington, 1983-1984.
- National Science Foundation Fellowship, University of Washington, 1980-1983.
- President's Undergraduate Fellowship, University of California, Davis, 1978.

Publications

- Rhode, D. 2003. Coprolites from Hidden Cave, Revisited: Evidence for occupation history, diet, and gender. *Journal of Archaeological Science* 30: 909-922.
- Rhode, D., and P. Wigand. 2002. Great Basin Vegetation History and Aquatic Systems: The Last 150,000 Years. In *Great Basin Aquatic Systems History*, edited by R. Hershler, D. B. Madsen, and D. Currey, pp. 309-368. Smithsonian Contributions to the Earth Sciences 33. Smithsonian Institution Press, Washington D.C.
- Rhode, D. 2002. *Native Plants of Southern Nevada: An Ethnobotany*. Salt Lake City: University of Utah Press.
- Rhode, D. 2002. Early Holocene juniper woodland and chaparral taxa in the central Baja California Peninsula, Mexico. *Quaternary Research* 57 (1): 102-108.
- Kelly, R., D. Rhode. 2001. Macrobotanical Remains. In *Prehistory of the Carson Desert and Stillwater Mountains: Environment, Mobility and Subsistence in a Great Basin Wetland*, by, pp. 254-262. Salt Lake City: University of Utah Press.
- Madsen, D.B., D. Rhode, D.K. Grayson, J.M. Broughton, S. D. Livingston, J. Hunt, J. Quade, D.N. Schmitt, and M.W. Shaver, III. 2001. Late Quaternary Environmental Change in the Bonneville Basin, Western USA. *Palaeoecology, Palaeogeography, Palaeoclimatology* 167 (3/4): 243-271.
- Rhode, D. 2001. Packrat Middens as a Tool for Reconstructing Historic Ecosystems. In *Historical Ecology Handbook: A restorationist's guide to reference ecosystems* (David Egan and Evelyn Howell, eds.), pp. 257-293. Covelo, Calif.: Island Press.
- Rhode, D., K.D. Adams, and R.G. Elston. 2000. Geoarchaeology and Holocene landscape history of the Carson Desert, western Nevada. In *Great Basin and Sierra Nevada*, edited by D. R. Lageson, S.G. Peters, and M.M. Lahren, pp. 45-74. Boulder, Colo.: Geological Society of America Field Guide.
- Madsen, D.B., D. Rhode. 2000. Chapter 11: Middle and Late Wisconsin Vegetation History in the Bonneville Basin. In *Late Quaternary Paleoeecology in the Bonneville Basin*, pp. 137-148. Utah Geological Survey Bulletin 130, Salt Lake City.
- Madsen, D.B., D. Rhode. 2000. Chapter 12: Holocene Vegetation History in the Bonneville Basin. In *Late Quaternary Paleoeecology in the Bonneville Basin*, pp. 149-164. Utah Geological Survey Bulletin 130, Salt Lake City.
- Hunt, D., D. Rhode, and D.B. Madsen. 2000. Chapter 5: Homestead Cave Flora and non-Vertebrate Fauna. In *Late Quaternary Paleoeecology in the Bonneville Basin*, pp. 47-58. Utah Geological Survey Bulletin 130, Salt Lake City.
- Rhode, D. 1999. The Role of Paleoeecology in the Development of Great Basin Archaeology, and Vice Versa. In *Models for the Millennium: Great Basin Anthropology Today*, edited by C. Beck, pp. 29-52. Salt Lake City : University of Utah Press.
- Buck, P.E., W. T. Hartwell, G. Haynes, and D. Rhode. 1999. Archaeological Investigations at Two Early Holocene Sites Near Yucca Mountain, Nevada. *Topics in Yucca Mountain Archaeology Number 2*, Quaternary Sciences Center, Desert Research Institute, Las Vegas, NV. Prepared for the US Department of Energy, Yucca Mountain Site Characterization Office, Las Vegas.
- Rhode, D., and D.B. Madsen. 1998. Pine Nut Use in the Early Holocene and Beyond: the Danger Cave Archaeobotanical Record. *Journal of Archaeological Science* 25 (12): 1199-1210.
- Feathers, J.K., and D. Rhode. 1998. Luminescence Dating of Protohistoric Pottery from the Great Basin.. *Geoarchaeology: An International Journal* 13 (3): 287-308.
- Rhode, D.. 1997. GIS and Obsidian Hydration-Based Chronologies of Regional Surface Archaeology: An Example from Yucca Mountain, Nevada, USA. In, *Archaeological Applications of GIS*, edited by M. North and I. Johnson. Australia: Sydney University Archaeological Methods Series Volume 5.

Collaborators

K. Adams
P.E. Buck
J.M. Broughton
R.G. Elston
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D.N. Schmitt
Eric Mc Donald
Saxon Sharpe

Advisors

Dr. Donald K. Grayson

Graduate Students Advised

G. Haynes
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J. Gardner
K. Al Qudah

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Vicken Etyemezian

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Education

Ph.D.	1998	Carnegie Mellon University	Environmental Engineering
M.S.	1994	Johns Hopkins University	Environmental Engineering
B.S.	1993	California Institute of Technology	Engineering & Applied Science
B.A.	1993	Occidental College	Physics

Professional Interests

- Research and air quality studies, including several ongoing air quality studies including BRAVO (Big Bend Regional Aerosol Visibility Observation study), SNAQS (Southern Nevada Air Quality Study), the Las Vegas Visibility Study, and two DoD studies focusing on dust emissions and quantification from military activities.
- Direct measurement and quantification of fugitive dust emissions, source apportionment, design of field sampling campaigns for air quality studies, data management, data analysis, and use of GIS systems in air quality engineering.
- Principal inventor of the PI-SWIRL system (Portable In-Situ Wind eRosion Laboratory) for aeolian emission measurement and inventory.
- Air quality measurements with the modeling of pollutant dispersion and deposition.

Professional Experience

2000-present	Assistant Research Professor, Desert Research Institute, Division of Atmospheric Sciences, Las Vegas, Nevada
1999-2000	Air Quality Scientist, Desert Research Institute, Division of Atmospheric Sciences, Las Vegas, Nevada
1999	Post-doctoral Research Assistant, Desert Research Institute, Division of Atmospheric Sciences, Las Vegas, Nevada
1994-1998	Graduate Research Assistant, Carnegie Mellon University, Department of Civil and Environmental Engineering, Pittsburgh, Pennsylvania
1993-1994	Graduate Research Assistant, Johns Hopkins University, Department of Geography and Environmental Engineering, Baltimore, Maryland

Professional Memberships

American Chemical Society (ACS)
American Association for Aerosol Research (AAAR)
Air and Waste Management Association (AWMA)

Selected Publications

Etyemezian, V., J. Gillies, H. Kuhns, D. Gillette, S. Ahonen, D. Nikolic, and J. Veranth. (In press). Deposition and Removal of Fugitive Dust in the Arid Southwestern United States: Measurements and Model Results. *Journal of the Air and Waste Management Association*.

Etyemezian V., H. Kuhns, J. Gillies, M. Green, M. Pitchford, and J. Watson. 2003. Vehicle based road dust emissions measurements (I): Methods and Calibration. *Atmospheric Environment* 37: 4559-4571.

Etyemezian V., H. Kuhns, J. Gillies, J. Chow, K. Hendrickson, M. McGown, and M. Pitchford. 2003. Vehicle based road dust emissions measurements (III): Effect of speed, traffic volume, location, and season on PM₁₀ road dust emissions. *Atmospheric Environment* 37: 4583-4593.

- Kuhns, H., V. Bohdan, J. Chow, V. Etyemezian, M. Green, D. Herlocker, S. Kohl, M. McGown, J. Ramsdell, W. Stockwell, M. Toole, and J. Watson. 2003. The Treasure Valley Secondary Aerosol Study I: Measurement and Equilibrium Modeling of Inorganic Secondary Aerosols and Precursors for Southwestern Idaho. *Atmospheric Environment* 37: 4511-4524.
- Stockwell, W.R., H. Kuhns, V. Etyemezian, M. Green, J. Chow, and J. Watson. 2003. The Treasure Valley secondary aerosol study II: modeling of the formation of inorganic secondary aerosols and precursors for southwestern Idaho. *Atmospheric Environment* 37: 4525-4534.
- Kuhns H., V. Etyemezian, M. Green, K. Hendrickson, M. McGown, K. Barton, M. Pitchford. 2003. Vehicle-based road dust emissions measurement (II): Effect of precipitation, winter time road sanding, and street sweepers on PM10 fugitive dust emissions from paved and unpaved roads. *Atmospheric Environment* 35: 4572-4583
- Chow, J., J. Watson, H. Kuhns, V. Etyemezian, D.H. Lowenthal, D. Crow, S. Kohl, J. Engelbracht, and M. Green. 2004. Source Profiles for Industrial, Mobile, and Area Sources in the Big Bend Regional Aerosol Visibility Observational Study. *Chemosphere* 54: 185 - 208.
- Dai, W., C.I. Davidson, V. Etyemezian, and M. Zufall. 2001. Wind Tunnel Studies of Particle Transport and Deposition in Turbulent Boundary Flows. *Aerosol Science and Technology* 35: 887-898.
- Kuhns, H., V. Etyemezian, D. Landwehr, C. MacDougall, M. Pitchford, and M. Green. 2001. Testing Re-entrained Aerosol Kinetic Emissions from Roads (TRAKER): A New Approach to Infer Silt Loading on Roadways. *Atmospheric Environment* 35: 2815-2825.
- Etyemezian, V., C.I. Davidson, M. Zufall, and W. Dai. 2000. Impingement of Raindrops on a Tall Building. *Atmospheric Environment* 34: 2399-2412.
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- Zufall, M J; W. Dai, C.I. Davidson, and V. Etyemezian. 1999. Dry deposition of particles to wave surfaces: I. Mathematical modeling. *Atmospheric Environment* 33: 4273-4272.
- Strader, R., C.I. Davidson, V. Etyemezian, and others. 1998. Vertical gradients of airborne concentration and deposition of pollutants on buildings. *Journal of Aerosol Science* 29: Supp/1; PT/1: S117
- Etyemezian, V., C.I. Davidson, S. Finger, M. Striegel, N. Barabas, and J. Chow. 1997. Vertical Gradients of Pollutant Concentrations and Deposition Fluxes on a Tall Limestone Building. *Journal of the American Institute for Conservation*, 37 (2): 187-210.

SAMPLE TASK ORDER

TASK ORDER NO.

Request for Services under Standard Agreement No.

Dated:

DESCRIPTION OF TASK:

(Short summary of work to be performed under this Task Order. Only services required to complete one project or task should be included in a Task Order).

SCOPE OF WORK:

- A. (Detailed description of service being requested – may include several separate subtasks which must necessarily be related to completing the main project or task).
- B. (State-provided information, requirements and/or services, if any).
- C. Deliverables/Milestones

SCHEDULE:

DETAILED COSTS:

CONTRACTOR STAFFING:

CONTACT PERSONS:

State's Task Order Manager:

Name
Street Address
City, State, Zip Code
Phone:
Fax:
Email

Contractor's Task Order Manager:

Name
Street Address
City, State, Zip Code
Phone
Fax:
Email:

TASK ORDER NO. (continued)

AUTHORIZED SIGNATURES:

Contractor and State agree that these services will be performed in accordance with the terms and conditions of Standard Agreement Number

STATE OF CALIFORNIA
Department of Water Resources

(CONTRACTOR)

Authorized Representative

Authorized Representative

(Task Orders for on-call or retainer work estimated to exceed \$50,000 will require the approval of the Department of General Services. In that event, any such task order shall not become effective until approved by the State Department of General Services):

Department of General Services
Office of Legal Services

EXHIBIT B

BUDGET DETAIL AND PAYMENT PROVISIONS

- I. **INVOICING AND PAYMENT:** Contractor shall submit three (3) copies of the invoice to the State only after receiving **written** notice of satisfactory completion or acceptance of work by the DWR Contract Manager. **The State will not accept an invoice for which work has not been approved and will return the invoice as a disputed invoice to the Contractor.**

Invoices shall be submitted not more than **monthly**, in arrears, bearing the contract number. Small business contractors **must** identify their certified small business status on the invoice.

Submit two (2) copies of each invoice to the Program Manager at the following address:

John Vrymoed
Department of Water Resources
Colorado River and Salton Sea Office
1416 9th Street, Room 1148
Sacramento, CA 94814

Submit one (1) additional copy of each invoice simultaneously to the DWR Accounting Office at the following address in order to expedite approval and payment:

DWR Accounting Office
Contracts Payable Unit
P.O. Box 942836
Sacramento, California 94236-0001

Undisputed invoices shall be **paid** within 45 days of the date received by the Contract Manager and/or the Accounting Office, whichever date occurs later.

- II. **BUDGET CONTINGENCY CLAUSE:** It is mutually agreed that if the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no further force and effect. In this event, the State shall have no liability to pay any funds whatsoever to Contractor or to furnish any other considerations under this Agreement and Contractor shall not be obligated to perform any provisions of this Agreement.

If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either: cancel this Agreement with no liability occurring to the State, or offer an Agreement Amendment to Contractor to reflect the reduced amount.

- III. **PROMPT PAYMENT CLAUSE:** Payment will be made in accordance with and within the time specified in Government Code, Chapter 4.5 (commencing with Section 927).

**Desert Research Institute
Labor Rates**

Name:	Title	Discipline	Hourly Rate	Address
Key Personnel:				
Vic Etyemezian	Associate Research Professor	Air Quality	\$98/hr	Desert Research Institute 755 E Flamingo Rd. Las Vegas, NV 89119
Eric McDonald	Associate Research Professor	Soil Geomorphology	\$136/hr	Desert Research Institute 2215 Raggio Pkwy Reno, NV 89512
Julie Miller	Hydrologic Research Associate	Hydrology	\$106/hr	Desert Research Institute 755 E Flamingo Rd. Las Vegas, NV 89119
David Rhode	Research Professor	Cultural Resources Archaeology	\$153/hr	Desert Research Institute 2215 Raggio Pkwy Reno, NV 89512
Other Personnel:				
Todd Caldwell	Assistant Research Soil Scientist	Soils	\$69/hr	Desert Research Institute 2215 Raggio Pkwy Reno, NV 89512
Richard French	Research Professor	Hydrology	\$185/hr	Desert Research Institute 2215 Raggio Pkwy Reno, NV 89512
William Albright	Assistant Research Hydrogeologist	Hydrogeology	\$107/hr	Desert Research Institute 2215 Raggio Pkwy Reno, NV 89512
Kerry Varley	Assistant Research Archaeologist	Archaeology	\$69/hr	Desert Research Institute 755 E Flamingo Rd. Las Vegas, NV 89119
David Dubois	Assistant Research Air Quality Scientist	Air Quality	\$77/hr	Desert Research Institute 755 E Flamingo Rd. Las Vegas, NV 89119
Jin Xu	Assistant Research Professor	Air Quality	\$75/hr	Desert Research Institute 755 E Flamingo Rd. Las Vegas, NV 89119

GTC 304

EXHIBIT C

GENERAL TERMS AND CONDITIONS

1. APPROVAL: This Agreement is of no force or effect until signed by both parties and approved by the Department of General Services, if required. Contractor may not commence performance until such approval has been obtained.
2. AMENDMENT: No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties and approved as required. No oral understanding or Agreement not incorporated in the Agreement is binding on any of the parties.
3. ASSIGNMENT: This Agreement is not assignable by the Contractor, either in whole or in part, without the consent of the State in the form of a formal written amendment.
4. AUDIT: Contractor agrees that the awarding department, the Department of General Services, the Bureau of State Audits, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Agreement. Contractor agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of records retention is stipulated. Contractor agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Contractor agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of this Agreement. (GC 8546.7, PCC 10115 et seq., CCR Title 2, Section 1896).
5. INDEMNIFICATION: Contractor agrees to indemnify, defend and save harmless the State, its officers, agents and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Contractor in the performance of this Agreement.
6. DISPUTES: Contractor shall continue with the responsibilities under this Agreement during any dispute.
7. TERMINATION FOR CAUSE: The State may terminate this Agreement and be relieved of any payments should the Contractor fail to perform the requirements of this Agreement at the time and in the manner herein provided. In the event of such termination the State may proceed with the work in any manner deemed proper by the State. All costs to the State shall be deducted from any sum due the Contractor under this Agreement and the balance, if any, shall be paid to the Contractor upon demand.

8. INDEPENDENT CONTRACTOR: Contractor, and the agents and employees of Contractor, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of the State.

9. RECYCLING CERTIFICATION: The Contractor shall certify in writing under penalty of perjury, the minimum, if not exact, percentage of recycled content, both post consumer waste and secondary waste as defined in the Public Contract Code, Sections 12161 and 12200, in materials, goods, or supplies offered or products used in the performance of this Agreement, regardless of whether the product meets the required recycled product percentage as defined in the Public Contract Code, Sections 12161 and 12200. Contractor may certify that the product contains zero recycled content. (PCC 10233, 10308.5, 10354)

10. NON-DISCRIMINATION CLAUSE: During the performance of this Agreement, Contractor and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Contractor and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractor and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

11. CERTIFICATION CLAUSES: The CONTRACTOR CERTIFICATION CLAUSES contained in the document CCC 304 are hereby incorporated by reference and made a part of this Agreement by this reference as if attached hereto.

12. TIMELINESS: Time is of the essence in this Agreement.

13. COMPENSATION: The consideration to be paid Contractor, as provided herein, shall be in compensation for all of Contractor's expenses incurred in the performance hereof, including travel, per diem, and taxes, unless otherwise expressly so provided.

14. GOVERNING LAW: This contract is governed by and shall be interpreted in accordance with the laws of the State of California.

15. ANTITRUST CLAIMS: The Contractor by signing this agreement hereby certifies that if these services or goods are obtained by means of a competitive bid, the Contractor shall comply with the requirements of the Government Codes Sections set out below.

a. The Government Code Chapter on Antitrust claims contains the following definitions:

- 1). "Public purchase" means a purchase by means of competitive bids of goods, services, or materials by the State or any of its political subdivisions or public agencies on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code.
- 2). "Public purchasing body" means the State or the subdivision or agency making a public purchase. Government Code Section 4550.

b. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder. Government Code Section 4552.

c. If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Government Code Section 4553.

d. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action. See Government Code Section 4554.

16. CHILD SUPPORT COMPLIANCE ACT: "For any Agreement in excess of \$100,000, the contractor acknowledges in accordance with, that:

a). The contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with section 5200) of Part 5 of Division 9 of the Family Code; and

b) The contractor, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department."

17. UNENFORCEABLE PROVISION: In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.

18. UNION ACTIVITIES For all contracts, except fixed price contracts of \$50,000 or less, the Contractor acknowledges that:

By signing this agreement Contractor hereby acknowledges the applicability of Government Code Section 16645 through Section 16649 to this agreement and agrees to the following:

- a) Contractor will not assist, promote or deter union organizing by employees performing work on a state service contract, including a public works contract.
- b) No state funds received under this agreement will be used to assist, promote or deter union organizing.
- c) Contractor will not, for any business conducted under this agreement, use any state property to hold meetings with employees or supervisors, if the purpose of such meetings is to assist, promote or deter union organizing, unless the state property is equally available to the general public for holding meetings.
- d) If Contractor incurs costs, or makes expenditures to assist, promote or deter union organizing, Contractor will maintain records sufficient to show that no reimbursement from state funds has been sought for these costs, and that Contractor shall provide those records to the Attorney General upon request.

**EXHIBIT D – Special Terms and Conditions for
Department of Water Resources
(Local Public Entities Receivables)**

1. **AVAILABILITY OF FUNDS:** Work to be performed under this contract is subject to availability of funds through the State's normal budget process.
2. **RESOLUTION OF DISPUTES:** In the event of a dispute, Contractor shall file a "Notice of Dispute" with the Director or the Director's Designee within ten (10) days of discovery of the problem. The State and Contractor shall then attempt to negotiate a resolution of such claim and, if appropriate, process an amendment to implement the terms of any such resolution. If the State and Contractor are unable to resolve the dispute, the decision of the Director or the Director's Designee shall be final, unless appealed to a court of competent jurisdiction.
3. **RENEWAL OF CCC:** Contractor shall renew the Contractor Certification Clauses or successor documents every (3) years or as changes occur, whichever occurs sooner.
4. **TERMINATION CLAUSE:** The State may terminate this contract without cause upon 30 days advance written notice. The Contractor shall be reimbursed for all reasonable expenses incurred up to the date of termination.
5. **CONFLICT OF INTEREST:**
 - a. **Current and Former State Employees:** Contractor should be aware of the following provisions regarding current or former state employees. If Contractor has any questions on the status of any person rendering services or involved with the Agreement, the awarding agency must be contacted immediately for clarification.
 - (1) **Current State Employees:** (PCC §10410)
 - (a) No officer or employee shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment.
 - (b) No officer or employee shall contract on his or her own behalf as an independent goods or services contractor with any state agency to provide
 - (2) **Former State Employees:** (PCC §10411)
 - (a) For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency.
 - (b) For the twelve-month period from the date he or she left state employment, no former state officer or employee may enter into a contract with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to his or her leaving state service.

b. Penalty for Violation:

- (a) If the Contractor violates any provisions of above paragraphs, such action by Contractor shall render this Agreement void. (PCC §10420)

c. Members of Boards and Commissions:

- (a) Members of boards and commissions are exempt from this section if they do not receive payment other than payment of each meeting of the board or commission, payment for preparatory time and payment for per diem. (PCC §10430 (e))

d. Representational Conflicts of Interest:

The Contractor must disclose to the DWR Program Manager any activities by contractor or subcontractor personnel involving representation of parties, or provision of consultation services to parties, who are adversarial to DWR. DWR may immediately terminate this contract if the contractor fails to disclose the information required by this section. DWR may immediately terminate this contract if any conflicts of interest cannot be reconciled with the performance of services under this contract.

e. Financial Interest in Contracts:

Contractor should also be aware of the following provisions of Government Code §1090:

"Members of the Legislature, state, county district, judicial district, and city officers or employees shall not be financially interested in any contract made by them in their official capacity, or by any body or board of which they are members. Nor shall state, county, district, judicial district, and city officers or employees be purchasers at any sale or vendors at any purchase made by them in their official capacity."

f. Prohibition for Consulting Services Contracts:

For consulting services contracts (see PCC §10335.5), the Contractor and any subcontractors (except for subcontractors who provide services amounting to 10 percent or less of the contract price) may not submit a bid/SOQ, or be awarded a contract, for the provision of services, procurement of goods or supplies or any other related action which is required, suggested, or otherwise deemed appropriate in the end product of such a consulting services contract (see PCC §10365.5).

RECYCLED CONTENT CERTIFICATION FORM

To be completed by the vendor/bidder/contractor and returned to:

DEPARTMENT OF WATER RESOURCES
 Dana Brazelton
 Departmental Services Office
 1416 Ninth Street, Room 315, Sacramento, CA 95814
 (916) 651-6077 FAX: (916) 653-5888

COMPANY: Desert Research Institute (DRI)PERSON COMPLETING FORM: Linda PiehlDATE: June 2, 2004

DESCRIPTION Please include item name and product number	PERCENT RECYCLED BY WEIGHT		RECYCLED MATERIAL TYPE	BRAND
	% POSTCONSUMER (1)	% TOTAL RECYCLED CONTENT (2)		
Xerox Business Multipurpose 4200 paper, #3R2047	0%	0%	N/A	Xerox
Memorex 700MB/80 minute/48x multispeed CD-R	0%	0%	N/A	Memorex

This form must be completed, signed, and returned by vendor, bidder, and/or contractor. State law requires any and all recycled content of a product to be disclosed to the State by the manufacturer or supplier of the product. If a product contains no recycled content, either post consumer or secondary material, the vendor/bidder/contractor shall so certify.

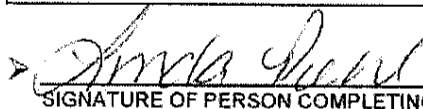

POST CONSUMER (1) materials are defined as only those materials that have been disposed of as a solid waste at the completion of their life cycle. Secondary material (i.e., manufacturing waste) **should not** be counted in this percentage. The post-consumer content is usually the second percentage in the description of the item's recycled content. In the example description below, the "40%" is the POST CONSUMER recycled content.

TOTAL RECYCLED CONTENT (2) is the sum total of **ALL** recycled content in the item including both secondary and post-consumer materials. Usually this percentage is shown as the first percentage in a recycled content description such as "Carton contains 100% recycled fiber, and 40% post consumer fiber." In this example, the "100%" is the TOTAL recycled content.

Public Contract Code Sections 10233, 10308.5, 10354, and 12205(a) require certification in writing, under penalty of perjury, to the State agency awarding a contract, the minimum, if not the exact, percent of postconsumer and secondary material in the products, materials, goods, or supplies offered or sold.

I certify that the above information is true. I further certify that these environmental claims for recycled content regarding these products are consistent with the Federal Trade Commission's Environmental Marketing Guidelines in accordance with PCC 12404. These guidelines are available at <http://www.ftc.gov/bcp/arnrule/guides980427.htm>.

NAME OF PERSON COMPLETING FORM Linda Piehl	TITLE Business Manager	AGENCY/COMPANY Desert Research Institute
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SIGNATURE OF PERSON COMPLETING FORM

DATE

EXHIBIT E

ADDITIONAL PROVISIONS

1. COPYRIGHT: All rights in copyright works created by the Contractor in the performance of work under this agreement are the property of the State.
2. REIMBURSEMENT CLAUSE: If applicable, travel and per diem expenses to be reimbursed under this contract shall be at the same rates the State provides for unrepresented employees in accordance with the provisions of Title 2, Chapter 3, of the California Code of Regulations. Travel and Per Diem Expenses, Attachment 1, is attached and made a part of this Agreement by this reference. Contractor's designated headquarters for the purpose of computing such expenses shall be as specified in Exhibit B, Attachment 1.
3. EVALUATION OF CONTRACTOR FOR CONSULTANT AGREEMENTS: Performance of the Contractor under this Agreement will be evaluated. At the conclusion of the contract, the evaluation shall be prepared on Contract/Contractor Evaluation Sheet, STD. 4 and forwarded to the Contract Services Office where they will be filed. A copy of any negative evaluation for contracts over \$5,000, will be sent to the Department of General Services, Office of Legal Services.
4. CERTIFICATE OF INSURANCE: Contractor shall furnish to the State a certificate of insurance stating that there is commercial general liability insurance presently in effect for the Contractor of not less than \$1,000,000 per occurrence for bodily injury and property damage liability combined. The Contractor shall provide required proof of insurance within 10 days of award.

The certificate of insurance must include the following provisions:

- a. The insurer will not cancel the insured's coverage without thirty (30) days' prior written notice to the State.
- b. The State of California, its officers, agents, employees, and servants are included as additional insured, but only with respect to work performed for the State of California under this contract.

The State of California will not be responsible for any premiums or assessment on the policy.

Professional Liability. Contractor shall maintain Professional Liability covering any damages caused by an error, omission, or any negligent act. Limits of not less than \$1,000,000 per occurrence shall be provided.

Contractor agrees that the bodily injury liability insurance herein provided for shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the time of this Agreement, Contractor agrees to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of this Agreement, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of the Department of General Services and Contractor agrees that no work or services shall be performed prior to the giving of such approval. In the event Contractor fails to keep insurance coverage in effect at all times as herein provided, in addition to any other remedies it may have, State may terminate this Agreement upon the occurrence of such event.

Insurance certificates must have an original signature.

5. PERMIT AND LICENSES: Contractor shall procure all permits and licenses, pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the work.
6. POLITICAL REFORM ACT: Contractor shall comply with the language stated in the Standard Contract Provisions Concerning the Political Reform Act, Exhibit E, Attachment 2. Contractor shall file a Statement of Economic Interests (Fair Political Practices Commission Form 700) upon assuming office, annually, and within 30 days after leaving office.
7. 90-DAY AND FINAL DVBE SUBCONTRACTOR ACTIVITY REPORTS

The Contractor is required to furnish the Department with reports at 90-day intervals identifying DVBE subcontractor(s) activities performed or commodities used, and the total paid to the subcontractor during the performance of the contract term. A final activity report will be due prior to the contract expiration date. If multiple DVBE contractors are providing services or commodities, the Contractor will furnish individual reports for each separate DVBE subcontractor(s) used.

The first report will be due 90-days from the date of contract approval. At the request of the Department, Contractor will submit copies of the DVBE contractor's paid invoices issued for that 90-day reporting period or final report.

If the Contractor fails to furnish the required reports, the Department may withhold final payment until the Contractor provides the required reports and, when requested by the Department, copies of paid invoices.

Final reports must be received by the Department no less than 14 days prior to the contract expiration date.

Reports shall be made using the DVBE Activity Report Form, Attachment 3. ***All reports shall be made to both the Department of Water Resources DVBE Advocate and the Project Manager for the contract as follows:***

Mail Reports to:

Department of Water Resources
DVBE Advocate
1416, Ninth Street, Room 315
P.O. Box 942836
Sacramento, California, 95814
Fax Number: (916) 653-6576

Department of Water Resources
John Vrymoed, Project Manager
1416 Ninth Street, Rm. 1148
Sacramento, California, 95814
Fax Number: (916) 653-9745

8. USE OF A FOREIGN LANGUAGE IN PUBLIC SERVICES: If Contractor's duties include public information, public outreach, or rendering of services to the public whereby contact is made with a substantial number of non-English speaking persons, Contractor shall employ a sufficient number of qualified bilingual persons in public contact positions to ensure provision of information and services in the languages of the non-English speaking persons.
9. CONTRACTS WITH THIRD PARTIES: The State reserves the right to enter into direct contracts with third parties to perform work in any of the areas listed in Exhibit A if the State determines in its sole discretion that such contracts are necessary for completion of the restoration planning effort.

TRAVEL AND PER DIEM EXPENSES

I. SHORT-TERM PER DIEM EXPENSES

- A. In computing reimbursement for continuous short-term travel of more than 24 hours and less than 31 consecutive days, the employee will be reimbursed for actual costs up to the maximum allowed for each meal, incidental, and lodging expense for each complete 24 hours of travel, beginning with the traveler's times of departure and return, as follows:

1. On the first day of travel on a trip of 24 hours or more:

Trip begins at or before 6 a.m.	Breakfast may be claimed on the first day.
Trip begins at or before 11 a.m.	Lunch may be claimed on the first day.
Trip begins at or before 5 p.m.	Dinner may be claimed on the first day.

2. On the fractional day of travel at the end of a trip of more than 24 hours:

Trip ends at or after 8 a.m.	Breakfast may be claimed.
Trip ends at or after 2 p.m.	Lunch may be claimed.
Trip ends at or after 7 p.m.	Dinner may be claimed.

If the fractional day includes an overnight stay, receipted lodging may also be claimed. No meal or lodging expense may be claimed or reimbursed more than once on any given date or during any 24-hour period.

3. Reimbursement shall be for actual expenses, subject to the following maximum rates:

Meals:

Breakfast	\$ 6.00	Receipts are not required for regular short-term travel meals
Lunch	\$ 10.00	
Dinner	\$ 18.00	
Incidentals	\$ 6.00	

Lodging:

Statewide	Actual up to \$84.00 plus tax
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When required to conduct State business and obtain lodging in the counties of Los Angeles and San Diego, reimbursement will be for actual receipted lodging to a maximum of \$110 plus tax.

When required to conduct State business and obtain lodging in the counties of Alameda, San Francisco, San Mateo, and Santa Clara, reimbursement will be for actual receipted lodging to a maximum of \$140 plus tax.

If lodging receipts are not submitted, reimbursement will be for meals only at the rates and time frames set forth in B#1 below.

B. In computing reimbursement for continuous travel of less than 24 hours, actual expenses, up to the maximums in #3 above, will be reimbursed for breakfast and/or dinner and/or lodging in accordance with the following time frames:

1. Travel begins at or before 6 a.m. and ends at or after 9 a.m.: Breakfast may be claimed. Travel begins at or before 4 p.m. and ends at or after 7 p.m.: Dinner may be claimed. If the trip of less than 24 hours includes an overnight stay, receipted lodging may be claimed. No lunch or incidentals may be reimbursed on travel of less than 24 hours.
2. Employees on short-term travel who stay in commercial lodging establishments or **commercial campgrounds** will be reimbursed for actual lodging expenses substantiated by a receipt. Employees who stay with friends or relatives, or who do not produce a lodging receipt, will be eligible to claim meals only.

II. LONG-TERM TRAVEL AND PER DIEM EXPENSES

A. Employee maintains a separate residence in the headquarters area:

1. Long-term travelers who maintain a permanent residence at their primary headquarters may claim daily long-term lodging up to \$24.00 with a receipt, and long-term meals of \$24.00 for each period of travel from 12 to 24 hours at the long-term location. For travel of less than 12 hours, the traveler may claim either \$24.00 in receipted lodging or \$24.00 in long-term meals.

B. Employee does not maintain a separate residence in headquarters area:

1. Long-term travelers who do not maintain a permanent residence at their headquarters may claim daily receipted lodging up to \$12.00, and long-term meals of \$12.00 for each period of travel from 12 to 24 hours at the long-term locations. For travel of less than 12 hours, the travelers may claim either \$12.00 in receipted lodging or \$12.00 in long-term meals.

III. MILEAGE REIMBURSEMENT

Reimbursement for personal vehicle mileage is 34 cents per mile.

Reimbursement for personal vehicle mileage using a specialized vehicle that has been modified to accommodate disabilities is 37 cents per mile.

IV. VEHICLE RENTAL

Reimbursement for vehicle rental shall be for actual and necessary costs of such rental and airplane usage shall be allowed at the lowest fare available. Claims for reimbursements shall be allowed upon submittal of the appropriate receipt. Refer to California Code of Regulations, Title 2, Sections 599.627 and 599.628.

California Department of Water Resources

**Standard Contract Provisions Regarding
Political Reform Act Compliance**

1. **POLITICAL REFORM ACT REQUIREMENTS:**

- a. **Form 700 Disclosure:** The Department of Water Resources (DWR) considers that the Contractor, subcontractor(s), and/or their key staff may be a consultant, i.e., a public official, within the meaning of the Political Reform Act, specifically Government Code §82048 and Title 2, California Code of Regulations §18701. Accordingly, as specified by DWR, such persons shall complete and submit to the DWR Personnel Officer a Form 700, Statement of Economic Interests, within 30 days of the earlier of the date work commences or the effective date of this agreement, updated both annually and when changes in key staff or duties occur. The financial interests disclosed shall be for Disclosure Category 1. Contractors may access the Form 700 on the Fair Political Practices Commission website at www.fppc.ca.gov. Any questions regarding completion of the Form 700 should be addressed to the FPPC at its website or at (866) 275-3772 (866/ASK-FPPC). A leaving office statement must also be filed upon completion of all contract assignments.
- b. **Financial Conflict of Interest Prohibition:** Contractor must review the Form 700s filed by its key staff and subcontractors and determine whether, in the light of the interests disclosed, performance under the contract could violate Government Code §87100. Contractor shall notify DWR immediately of any potentially disqualifying conflict of interest. Government Code §87100 provides:

“No public official at any level of state or local government shall make, participate in making or in any way attempt to use his official position to influence a governmental decision in which he knows or has reason to know he has a financial interest.”
- c. **Consequences of Failure to Comply with Political Reform Act Requirements:** Any one of the following shall constitute a breach of this Contract and shall be grounds for immediate termination of this Contract:
 - (1) Failure to complete and submit all required Form 700s within the 30-day period as required in paragraph A above, or respond to any request from the DWR Personnel Officer for additional information regarding any such Form 700s;
 - (2) Failure to notify DWR of a potentially disqualifying conflict of interest; and

- (3) The determination by DWR or the Contractor that any individual, who is a contractor, subcontractor, and/or a key member of their staff, has a financial interest that could result in a violation of Government Code §87100 provided, however, that DWR may opt to waive such breach if Contractor replaces any such individual within two working days after a determination of such financial interest.